## Annual Drinking Water Quality Report for 2009

## Town of Emmitsburg PWSID 0100010

We're pleased to present to you this year's Annual Quality Water Report. This report is designed to inform you about the quality water and services we deliver to you every day. Our constant goal is to provide you with a safe and dependable supply of drinking water. We want you to understand the efforts we make to continually improve the water treatment process and protect our water resources. We are committed to ensuring the quality of your water. Our water sources are five wells and Rainbow Lake. We are currently using 168,000 gallons per day from our surface water supply. The well usage varies with demand, which averages around 300,000 gallons per day. The surface water is mixed with wells #3, #4, and #5, and processed through the filtration plant. We also have wells #1 and #2, which go into the filtration plant and are disinfected and PH adjusted just prior to entering the storage tanks. We also are connected to Mount St. Mary's using approximately 11,000 gallons per day, this line is primarily for a back up for fire protection.

We have a source water protection plan available from our office that provides more information such as potential sources of contamination. This report shows our water quality and what it means.

The Town of Emmitsburg routinely monitors for contaminants in your drinking water according to Federal and State laws. This table shows the results of our monitoring for the period of January 1<sup>st</sup> to December 31<sup>st</sup>, 2009. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some contaminants. It's important to remember that the presence of these contaminants does not necessarily pose a health risk.

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

- Parts per million (ppm) or Milligrams per liter (mg/l) one part per million corresponds to one minute in two years or a single penny in \$10,000.
- Parts per billion (ppb) or Micrograms per liter one part per billion corresponds to one minute in 2,000 years, or a single penny in \$10,000,000.
- Picocuries per liter (pCi/L) picocuries per liter is a measure of the radioactivity in water.
- *Nephelometric Turbidity Unit (NTU)* nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.
- *Action Level* the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
  - Maximum Contamination level(MCL)- A contaminants level set by the STATE or EPA Maximum contamination level goal(MCLG)- The level set by the STATE or EPA for future limits.

TEST RESULTS										
Contaminant	Violation Y/N	Level Detected	Unit Measurement	MCLG	MCL	Likely Source of Contamination				
Microbiological (	Contam	inants	•							
1. Total Coliform Bacteria	N	0		0	presence of coliform bacteria in 5% of monthly samples	Naturally present in the environment				
2. Fecal coliform and <i>E.coli</i>	N	0		0	a routine sample and repeat sample if total coliform is positive, and one is also fecal coliform or <i>E. coli</i> positive	Human and animal fecal waste				
Inorganic Contai	minants	5		•						
Barium	N	.006	ppm		1ppm	Naturally occurring deposits, used in pigments, pyrotechnics, and medicines				
14. Copper	N	.2	ppm	1.3	AL=1.3	Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives				
17. Lead	N	8	ppb	0	AL=15 ppb	Corrosion of household plumbing systems, erosion of natural deposits				
19. Nitrate	N	.4	1ppm	10	10	Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits				
Nickel	N	.005	ppm			Naturally occurring deposits				
Fluoride	N	.1	ppm	4.0	4.0	Naturally occurring deposits				
Synthetic Organi	ic Conta	aminan	ts includii	ng Pest	icides and	Herbicides				
DALAPON	N	.13	ppb		.2ppm	Run-off from herbicides				
Volatile Organic	Volatile Organic Contaminants									
73. TTHM [Total trihalomethanes]	N	30.2	ppb	0	80	By-product of drinking water chlorination				
HAA5 (HALOACETIC ACIDS)	N	12.2	ppb		60	By-product of drinking water chlorination				
CHLOROFORM	N	9.8	ppb		80	By-product of drinking water chlorination				
BROMODICHLOROME THANE	N	4.3	ppb		80	By-product of drinking water chlorination				
DIBROMOCHLOROME THANE	N	1.1	ppb							
Unregulated Contaminants										
SODIUM	N	26.1	mg/l			Natural deposits				
SULFATE	N	11	mg/l	500		Erosion of natural deposits				

PH	N	7.5	UNITS						
RADIO ACTIVE CONTAMINENTS									
GROSS ALPHA	N	2	PCi/L		15Pci/L	Naturally occurring deposits			
GROSS BETA	N	2	Pci/L		4mrem/yr	Naturally occurring deposits			

## Microbiological Contaminants:

- (1) Total Coliform. Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially harmful, bacteria may be present. Coliforms were found in more samples than /allowed and this was a warning of potential problems.
- (2) Fecal coliform/E.Coli. Fecal coliforms and E. coli are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, and people with severely compromised immune systems.

## Inorganic Contaminants:

- (7) Antimony. Some people who drink water-containing antimony well in excess of the MCL over many years could experience increases in blood cholesterol and decreases in blood sugar.
- (8) Arsenic. Some people who drink water-containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.
- (14) Copper. Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water-containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.

The copper levels are in compliance. During our last set of lead samples we had all samples collected under the action limit.

- (17) Lead. Infants and children who drink water-containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure. If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Town of Emmitsburg is responsible for providing high quality drinking water, but cannot control a variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using the water for drinking or cooking. If you are concerned about lead in your drinking water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and EPA Safe Drinking Water Hotline at 1-800-426-4791 or at steps you can take to minimize exposure is available from the http://www.epa.gov/safewater/lead. Lead in drinking water is rarely the sole cause of lead poisoning, but it can add to a person's total lead exposure. All potential sources of lead in the household should be identified and removed, replaced or reduced.
- (19) Nitrate. Infants below the age of six months who drink water-containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue-baby syndrome. (73) TTHMs [Total Trihalomethanes]. Some people who drink water-containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer. The Town has just completed our Initial System Evaluation for THHM's and Haleocetic Acids (HAA5). These tests are required by the E.P.A and M.D.E. as part of the ongoing Safe Drinking Water Act.

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated contaminants, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing

chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

If you have any questions about this report or concerning your water utility, please contact Daniel R. Fissel at 301-447-3141. We want our valued customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled meetings. They are held on the first Monday of every month at the Town Hall beginning at 7:30 PM.

We at the TOWN OF EMMITSBURG work around the clock to provide top quality water to every tap. We ask that all our customers help us protect our water sources, which are the heart of our community, our way of life and our children's future.

WE ALSO ASK OUR CUSTOMERS TO REPORT ANY SUSPICIOUS ACTIVITIES TO THE TOWN HALL@301-600-6300. DURING THESE TIMES OF HIEGHTENED SECURITY, IF IT DOES NOT SEEM RIGHT PLEASE CALL IT IN! If no one is available please **call 911.** Please make water conservation a daily practice. If you see water coming out where you do not think it should be or an unusually wet area please inform the office, it may be a leak.

Email: 6/2/2010